

Date: Sat, 16 Jan 93 10:36:36 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #69  
To: Info-Hams

Info-Hams Digest                      Sat, 16 Jan 93                      Volume 93 : Issue    69

Today's Topics:

Any Comments about "Public" Field Day locations  
Boatanchors of old  
Code Class - How to make it Fun?  
Desense, nonsense, and filter design  
FT-530 Intermod and audio seperation issues  
How to get line-level audio out from DJ-580?  
ICOM-725 Info. (was ICOM-726)  
intermod, overload, desense? (3 msgs)  
Iraq monitoring  
Meaning of <SK> etc. for CW  
register listserv  
USCG cw changes

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

-----  
Date: Sat, 16 Jan 1993 14:49:18 GMT  
From: psinntp!news.columbia.edu!cunib.cc.columbia.edu!hyx1@uunet.uu.net  
Subject: Any Comments about "Public" Field Day locations  
To: info-hams@ucsd.edu

You can ask the ARRL for a few hundred copies of their handouts.  
73,  
Harry Xu (KB2LHA/AA)

-----

Date: Sat, 16 Jan 1993 17:09:17 GMT  
From: usc!elroy.jpl.nasa.gov!swrinde!gatech!kd4nc!ke4zv!gary@network.UCSD.EDU  
Subject: Boatanchors of old  
To: info-hams@ucsd.edu

In article <1993Jan14.184805.11088@odin.corp.sgi.com> adams@chuck.dallas.sgi.com  
(Charles Adams) writes:

>  
>anyone on this net have/ have had a challenger? in all my years of  
>operating cw, i never saw one of these rigs. was supposed to be super  
>cw rig. transmitter only.

Yes, I had a Challenger back in 1963 as my Novice rig. It was a fairly large square box capable of 75 watts input power, crystal controlled. It would operate AM, but was screen modulated. I made my first voice contact after I upgraded by attaching a crystal earphone to the mike input and shouting into a funnel connected to the earplug by a piece of rubber hose. :-)

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				emory!ke4zv!gary@gatech.edu

-----

Date: Sat, 16 Jan 1993 16:57:56 GMT  
From: data.nas.nasa.gov!eagle!sven.lerc.nasa.gov!fmfedor@ames.arpa  
Subject: Code Class - How to make it Fun?  
To: info-hams@ucsd.edu

Hi, I'm helping to teach a class for upgrade to General. It's for folks with 0 or 5 wpm.

Does anyone know of a way to 1)"teach" code and 2)make it FUN?

Most in the class have purchased the ARRL beginners set, but this is not enough to keep some interested in learning. The class consists of a fairly broad spectrum of people, we've recommended Super Morse et. al. to those who have access to computers. We were looking for activities or something to boost interest (fun).

Any and all suggestions are welcome, except flames about OF's, obsolete technology etc. Right now the reality is that if people want to upgrade they have to pass a code test.

tnx es 73

de Wayne N8JGA

--

A. W. Fedor  
n8jga@eagle.lerc.nasa.gov  
\* If my employers want their opinions they'll ask me. \*

NASA Lewis Research Center  
Sverdrup Technology Inc

=====

-----

Date: Sat, 16 Jan 1993 15:14:50 GMT  
From: swrinde!gatech!kd4nc!ke4zv!gary@network.UCSD.EDU  
Subject: Desense, nonsense, and filter design  
To: info-hams@ucsd.edu

In article <9301132338.aa18648@jackatak.raider.net> root@jackatak.raider.NET (Jack GF Hill - Sysop [HOME]) writes:

>  
>References <1993Jan9.141959.17257@ke4zv.uucp>,  
<1is80mINNb0r@clover.csv.warwick.ac.uk>, <1993Jan12.095904.7329@walter.cray.com>  
><usc!howland.reston.ans.net!spool.mu.edu!agate!doc.ic.ac.uk!warwick!warwick!not-  
for-mail@network.UCSD.EDU > Subject : Re: intermod, overload, desense?  
>In article <1993Jan12.095904.7329@walter.cray.com> jwl@ferrari.cray.com (Jim  
>  
>>..Couple of posts regarding details of quarter wave stub deleted..  
>  
>[Beaucoups of wonderful theory and discussion of filters deleted...]  
>--and, why delete that?  
>  
>Because, gentlepeople, the original question had to do with eliminating  
>an interfering 144Mhz signal from a TV. Now, I just betcha the TV  
>operates on Cable, and the offensive interference is at its \*very\* worst  
>on CATV channel 18, better known as Channel "E" in the "olden days" and  
>guess what the frequency range is, gang....

Thanks for playing, but the original question had nothing to do with  
TV or 2 meters. It was a request to eliminate desense to a scanner  
from a strong local FM station. Now don't you feel foolish?

Gary

--

Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary

Destructive Testing Systems	we break it.	uunet!rsiatl!ke4zv!gary
534 Shannon Way	Guaranteed!	emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244		emory!ke4zv!gary@gatech.edu

-----  
Date: Sat, 16 Jan 1993 16:28:57 GMT  
From: usc!howland.reston.ans.net!spool.mu.edu!agate!usenet.ins.cwru.edu!  
neoucom.edu!wtm@network.UCSD.EDU  
Subject: FT-530 Intermod and audio seperation issues  
To: info-hams@ucsd.edu

I received a call from an engineer named Tony in Yaesu technical support on Tuesday 1/11/93 confirming that a number of people had called to complain about spurious receive problems for the FT-530 in the 70 cm band. Tony wanted more details so that he could prepare a communication to send to the company's Japan headquarters.

I reiterated the problems as described here. Tony said that no specific problem had yet been identified with the FT-530 and that he did not know if the trouble affected all or a limited number of units. Tony, not surprisingly, declined to specifiy a time when a solution to the problem might be forthcoming.

In my case, the spurious receive was virtually uniform across the entire 430-450 MHz segment. The offending source is a high ERP paging transmitter on 454.100 MHz. Perhaps there are no UHF pagers in Japan?..

There is a little spurious / intermod on the 2m band, but I have yet to see any wideband receive HT that performs better than the FT-530 in the 2m portion.

I did not notice bleeding of the audio between 2m and 70cm, but I'll make a note to check that.

73,  
Bill

--  
Bill Mayhew        NEOUCOM Computer Services Department  
Rootstown, OH 44272-9995 USA    phone: 216-325-2511  
wtm@uhura.neoucom.edu (140.220.1.1)    146.580: N8WED

-----

Date: Sat, 16 Jan 1993 14:29:31 GMT  
From: usc!howland.reston.ans.net!paladin.american.edu!gatech!kd4nc!ke4zv!  
gary@network.UCSD.EDU  
Subject: How to get line-level audio out from DJ-580?  
To: info-hams@ucsd.edu

In article <1993Jan13.201846.18293@news.csd.sgi.com> rosso@roscoe.csd.sgi.com  
(Ross Oliver) writes:

>  
>Does anyone know how to get line-level audio from an Alinco DJ-580 handheld?  
>I would like to connect it to a tape recorder, but the "speaker" jack is  
>for driving an 8-ohm speaker. Is there an adaptor or simple circuit I  
>could buy/build to do the conversion?

Sure, simple circuit:

```

                T1
    <-----| || |----->
              ) || (
from radio  8 ohm ) || ( 600 ohm   To recorder
              ) || (
    <-----| || |----->
```

T1 can be a professional Stancor or UTC matching transformer, or it can be any audio output transformer designed to work into an 8 ohm load wired up backwards. Their impedance on the other side varies from 200-2000 ohms, but will give the desired balanced audio. The exact impedance match isn't that important unless perfectly flat frequency response is required. A so-called "70 volt" line transformer will work fine. Unsquench on a vacant channel and adjust the volume control for a +4 dbm reading, usually corresponds to 0 VU on the recorder, and you're all set.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				emory!ke4zv!gary@gatech.edu

-----

Date: Sat, 16 Jan 1993 13:58:38 GMT  
From: usc!howland.reston.ans.net!paladin.american.edu!gatech!kd4nc!ke4zv!  
gary@network.UCSD.EDU  
Subject: ICOM-725 Info. (was ICOM-726)  
To: info-hams@ucsd.edu

In article <C0szJt.BwI@ireq.hydro.qc.ca> Jean-Marie Houle

<houlejm@ireq.hydro.qc.ca> writes:  
>In article <1993Jan12.133113.4799@ke4zv.uucp> Gary Coffman,  
>gary@ke4zv.uucp writes:  
>>In article <randall.726545044@seashore> randall@informix.com (Randall  
>Rhea) writes:  
>>>  
>>>If you want a base station, I would spend a little extra money  
>>>for a 735. The 735 is generally regarded as the best of the  
>>>low-end rigs. I have both, and I certainly prefer the 735.  
>>  
>>I would second Randall's comments. The 735 and an AH-3 are a  
>>super combination for mobile or home use.  
>  
>Does the AH-3 works with the 735? The litterature I have mentions the  
>AH-2 for use with the 735. Maybe the AH-3 is a newer model that can  
>replace the AH-2.  
>  
>I am asking because I am going to put the 735 in the boat next summer and  
>I will need one.

Sorry, I should have said the AH-2a for the 735. It doesn't have the  
ability to communicate with the AH-3.

Gary

```
--
Gary Coffman KE4ZV      | You make it,      | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it.    | uunet!rsiatl!ke4zv!gary
534 Shannon Way        | Guaranteed!     | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 |                  | emory!ke4zv!gary@gatech.edu
```

```
-----
Date: Sat, 16 Jan 1993 14:36:47 GMT
From: usc!howland.reston.ans.net!paladin.american.edu!gatech!kd4nc!ke4zv!
gary@network.UCSD.EDU
Subject: intermod, overload, desense?
To: info-hams@ucsd.edu
```

In article <1993Jan13.180934.14930@nnnnpd2.cxo.dec.com> little@nuts2u.enet.dec.com  
(nuts2u::little) writes:  
>gary@ke4zv.uucp (Gary Coffman) writes:  
>  
>>Note that the open coax end represents a voltage maximum. If the coax  
>>is shorted at the end, it becomes a voltage minimum thus reversing the  
>>sense of the reflected wave. The signals then \*add\* at the Tee rather  
>>than subtract. The addition can only give 3db "gain", however, so it's  
>>not very useful. A shorted 1/2 wave line behaves like an open 1/4 wave

>>line, and vice versa.

>

>Wait a minute, how is a passive stub going to provide gain? It can only  
>add in the signal that it siphoned off, for a net change of 0 less the  
>cable loss in the stub. If this were not the case, you would have managed  
>to build the basis for a perpetual motion machine. 3 dB gain with a  
>passive component is essentially fabricating energy from thin air.

That's why "gain" is in quotes. The signal reinforces at the Tee for  
the shorted 1/4 wave stub \*at the frequency for which the stub is cut\*.  
At all other frequencies, the reinforcement is less, one octave away  
it's our ideal notch. So the signal at the resonant point is a maximum  
when viewed from the output of the network, but not more than the input  
signal of course. "Gain" in this context is used in the same sense as  
antenna "gain" in that it's referred to the \*loss\* at all other frequencies,  
or directions in the case of an antenna.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				emory!ke4zv!gary@gatech.edu

-----

Date: Sat, 16 Jan 1993 14:42:07 GMT

From: swrinde!gatech!kd4nc!ke4zv!gary@network.UCSD.EDU

Subject: intermod, overload, desense?

To: info-hams@ucsd.edu

In article <1993Jan13.180942.15001@nntpd2.cxo.dec.com> little@nuts2u.enet.dec.com  
(nuts2u::little) writes:

>Also, although it is probably obvious, this sort of Tee style trap will  
>attenuate other frequencies besides the one it is designed to eliminate.  
>Any frequency that the stub is an odd 1/4 wave multiple will also be  
>attenuated. For single band operation, this isn't a problem, but for  
>scanner operation, this is potentially a concern.

Yes, this is true of any cavity or stripline notch filter. It can also be  
true of lumped networks in certain cases. Multi-pole filters avoid this  
problem by having high pass and low pass elements in their design.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary





Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				emory!ke4zv!gary@gatech.edu

-----  
Date: Sat, 16 Jan 1993 15:32:14 GMT  
From: swrinde!gatech!kd4nc!ke4zv!gary@network.UCSD.EDU  
Subject: Iraq monitoring  
To: info-hams@ucsd.edu

In article <1j3qa8INNdot@usenet.INS.CWRU.Edu> ah595@cleveland.Freenet.Edu (Eric J. Hess) writes:

>  
> Would it be possible to monitor the recent happenings  
>in Iraq? I mean such things as aircraft and such. What would  
>be the best monitor for this? Right now I have the RS PRO-43  
>but am looking for something that can receive more frequencies.

Most military aircraft use UHF frequencies in the 300-400 MHz range, as well as other VHF and UHF frequencies. Mostly AM, but some SSB and FM, depending on the system. It's unlikely in the extreme that you'll pick up any of this from Cleveland, though if you were in Kuwait you might have interesting things to monitor.

US logistic support flights do use HF, often in the 10-15 MHz spectrum, that you might be able to hear from this side of the world. Most Navy communications goes by Fleetsatcom, but they do still use some HF, so you might hear something from the ships in the area with a HF receiver as well.

A good shortwave communications receiver, not a cheapie SW broadcast receiver, will add to your monitoring enjoyment for utility communications such as are generated by military activities. But if you are more interested in \*information\* rather than the thrill of the chase, then you should do what professional intelligence agencies do, watch CNN.

Gary

--  

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				emory!ke4zv!gary@gatech.edu

-----  
Date: Sat, 16 Jan 1993 15:50:46 GMT

From: swrinde!gatech!kd4nc!ke4zv!gary@network.UCSD.EDU  
Subject: Meaning of <SK> etc. for CW  
To: info-hams@ucsd.edu

In article <1993Jan14.184631.10949@odin.corp.sgi.com> adams@chuck.dallas.sgi.com  
(Charles Adams) writes:  
>it's interesting to note that people who understand english and can spell  
>like cw. we also seem to be creative on abbreviations and short cuts.

On the other hand, those of us who don't "spell like cw" know enough to  
capitalize the word English in this context. And, we generally prefer  
a different encoding of the alphabet than variable length make-break  
signalling combinations of an archaic nature. Sometimes we are even  
capable of encoding entire words into phenomes without any mechanical  
aid whatsoever. :-)

Gary

--  
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary  
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary  
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary  
Lawrenceville, GA 30244 | emory!ke4zv!gary@gatech.edu

-----  
Date: 16 Jan 93 14:28:00 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: register listserv  
To: info-hams@ucsd.edu

register info-hams Todd Strube

-----  
Date: Sat, 16 Jan 1993 16:12:58 GMT  
From: swrinde!gatech!kd4nc!ke4zv!gary@network.UCSD.EDU  
Subject: USCG cw changes  
To: info-hams@ucsd.edu

In article <86PDXB1w165w@tossport.sv.com> lee@tossport.sv.com (Lee Reynolds) writes:  
>....Just an FYI for those of us that like to monitor such things....  
>  
>  
>U.S. COAST GUARD TO DISCONTINUE WATCHKEEPING ON THE DISTRESS  
>FREQUENCY 500 KHZ AND CEASE ALL MORSE CODE SERVICES  
>  
>Effective August 1, 1993, all United States Coast Guard  
>Communication Stations and Cutters will discontinue watchkeeping on

>the distress frequency 500 KHZ, and will cease all morse code  
>services in the medium frequency radiotelegraphy band. More  
^^^^  
>efficient telecommunication systems are now available to provide  
^^^^^^^^^^  
>the mariner with options for initiating or relaying distress  
>alerts, and passing and receiving maritime safety information.

heh heh

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				emory!ke4zv!gary@gatech.edu

-----  
Date: 16 Jan 1993 11:49:00 -0600  
From: usc!howland.reston.ans.net!zaphod.mps.ohio-state.edu!moe.ksu.ksu.edu!  
matt.ksu.ksu.edu!news@network.UCSD.EDU  
To: info-hams@ucsd.edu

References <eNTRwB1w164w@ham.almanac.bc.ca>,  
<1993Jan4.144520.19597@ul1tb.isc.rit.edu>, <1993Jan6.093218.27598@qualcomm.com>  
Reply-To : steve@matt.ksu.ksu.edu (Steve Schallehn)  
Subject : CDMA Packet Radio (WAS Re: Who do repeater coordinators represent?)

karn@servo.qualcomm.com (Phil Karn) writes:

> [...] Unfortunately, the  
>alternative techniques to "do it right" are still not yet known in the  
>amateur service. These include:  
>  
>1. Spread spectrum, which creates a channel that degrades more  
>gracefully with multiple simultaneous transmitters than does a  
>narrowband channel.

I have done some studies of modulation techniques proposed for the next  
generation mobile telephone systems and found CDMA (spread-spectrum) to  
be optimal. I agree that CDMA would also be great for amateur radio,  
but I thought CDMA is patented by Qualcomm. What effects will the  
patent have on developing CDMA packet networks?

[ Remainder of excellent suggestions deleted ]  
>Phil

-Steve Schallehn KB0AGD  
Kansas State University

-----  
Date: Sat, 16 Jan 1993 15:08:28 GMT  
From: swrinde!gatech!kd4nc!ke4zv!gary@network.UCSD.EDU  
To: info-hams@ucsd.edu

References <PHR.93Jan7190051@napa.telebit.com>, <lilgetINN6pc@matt.ksu.ksu.edu>, <104785@netnews.upenn.edu>  
Reply-To : gary@ke4zv.UUCP (Gary Coffman)  
Subject : Re: PC repeater controller

In article <104785@netnews.upenn.edu> depolo@eniac.seas.upenn.edu (Jeff DePolo) writes:

>In article <lilgetINN6pc@matt.ksu.ksu.edu> steve@matt.ksu.ksu.edu (Steve Schallehn) writes:

>>phr@telebit.com (Paul Rubin) writes:

>>

>>>Why can't someone make a repeater controller out of a simple  
>>>personal computer (286 class), with maybe a relay box controlled...

>

>There is such a beast soon to hit the market. It's made by A-to-D (?) technologies. It uses a 286 with a hefty hard drive, some custom hardware, etc. There is one machine in the area that is beta testing it (I don't remember the model number). It comes with a digital voice recorder (very good quality audio), mailboxes, autopatch, everything. The interesting thing about it is that all user functions are done through menus. When user #10 wants to do something (e.g. use the autopatch, check his mail, leave mail, etc.), he enters his own access code and it replies "WN3A logon" and then you enter the function code (called a "CFC"). From then out, it's all menus. For example, the message submenu would say "1 - Read, 2 - Record, 3 - Send, 4 - Delete", etc. Pretty neat, although it does get annoying listening to all the menus. You can skip the menu just by hitting the appropriate commands without listening to the menus, though. Each user has his/her own "account" on the system, so passwords and control codes are individualized.

>

>Another interesting feature is that all of the voice on the controller is non-synthesized. It's all one-word DVR tracks that are buffered/kept in RAM for playback speed. Sounds really good, basically like a real person with a problem with speech inflection. I believe it also has an interface available for controlling Icom 900/901 band units like the ACC controllers.

Three local Atlanta hams started this company. The prototype machines

have been running for a couple of years here, 147.06 and 145.47. Some of the other repeaters in the area have also installed them. They work well, if you like that sort of thing. There have been product announcements in the various ham rags, they have a booth at many of the major hamfests with a demo system operating, etc. This is a first class effort. The controller is actually a single board computer that uses the PC bus for power, and as a peripheral for data storage and retrieval. The PC can lock up and the repeater controller still works, but without voice mail and all the other voice prompting. Both the single card and the PC software support watchdog timers so that either can detect that the other is hung and generate a reset. It's also possible to configure, test, and control the system via the phone line as if you were actually at the computer console. IMHO this system is vastly superior to ACC, but I don't want a talking, singing, and dancing controller on my machine, so I will stick with S-Comm. :-)

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				emory!ke4zv!gary@gatech.edu

-----

End of Info-Hams Digest V93 #69

\*\*\*\*\*